

1 ABSTRACT OF THE DISCLOSURE

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3 An X-ray topographic system comprises an X-ray
4 generator producing a beam of X-rays impinging on a
5 limited area of a sample such as a silicon wafer. A
6 solid state detector is positioned to intercept the
7 beam after transmission through or reflection from
8 the sample. The detector has an array of pixels
9 matching the beam area to produce a digital image of
10 said limited area. Relative stepping motion between
11 the X-ray generator and the sample produces a series
12 of digital images which are combined together. In
13 optional embodiments, an X-ray optic is interposed
14 to produce a parallel beam to avoid image doubling,
15 or the effect of image doubling is removed by
16 software.